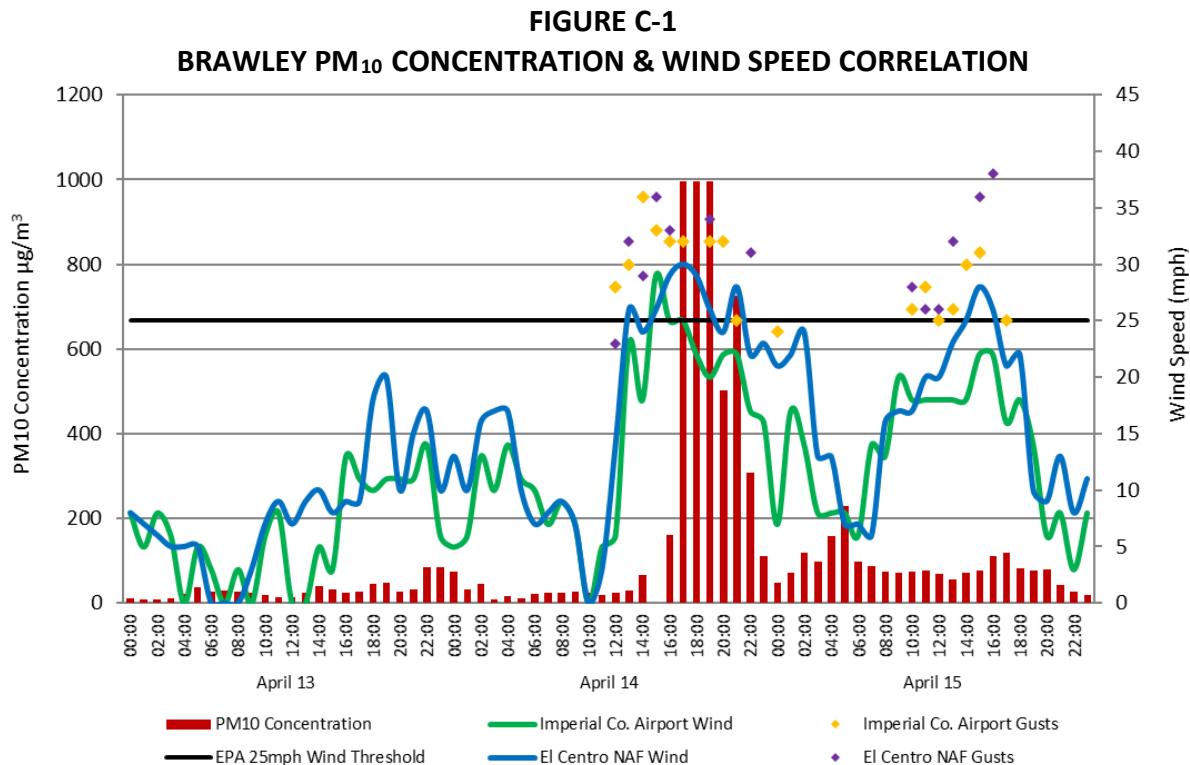


## Appendix C

### Correlated PM<sub>10</sub> Concentrations and Winds

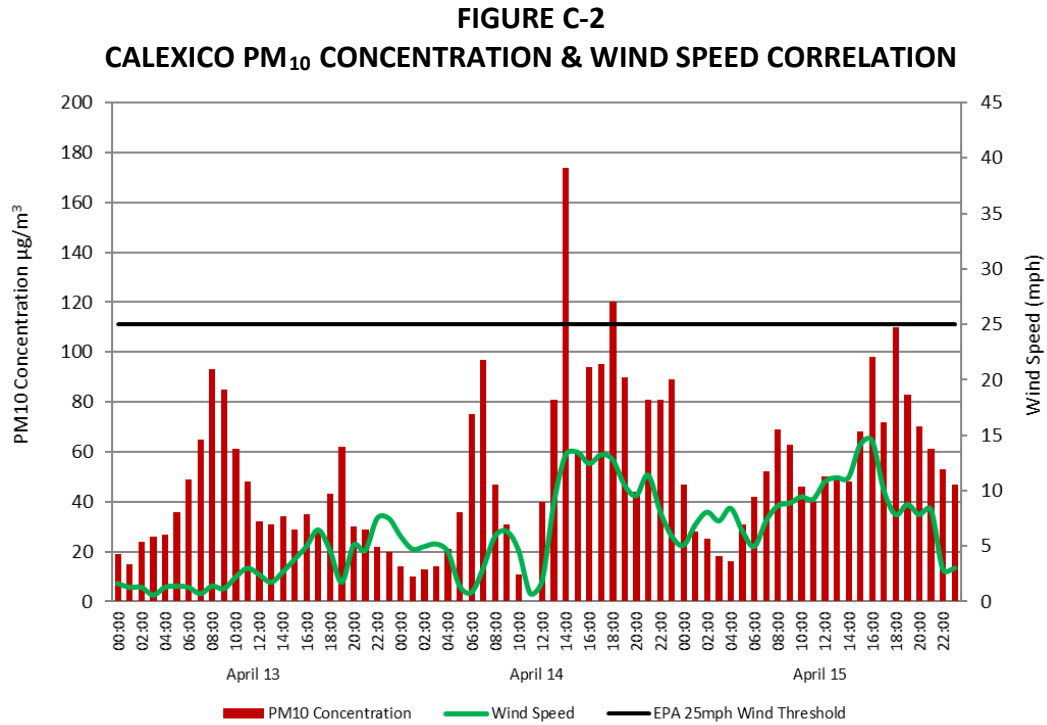
The following graphs illustrate the direct correlation between wind speeds<sup>1</sup> and PM<sub>10</sub> concentrations at select monitoring sites within the Salton Sea Air Basin on April 14, 2016. Note a variety of instruments measure wind speed at different times during any given hour. Therefore, the following graphs reflect the hour of the wind measurement.

#### IMPERIAL COUNTY SITES (FIGURES C-1 to C-5)

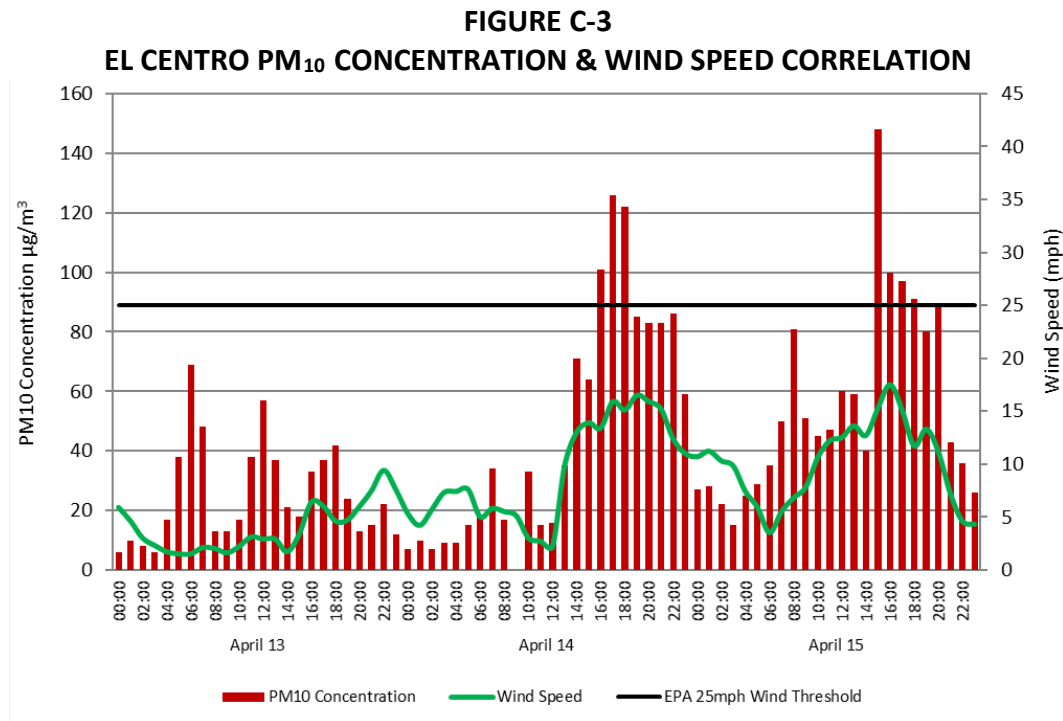


**Fig C-1:** Brawley saw increased hourly concentrations in response to dust being transported downstream. Brawley does not measure wind speed data. Air quality data from the EPA's AQS data bank. Wind data from the NCEI's QCLCD system

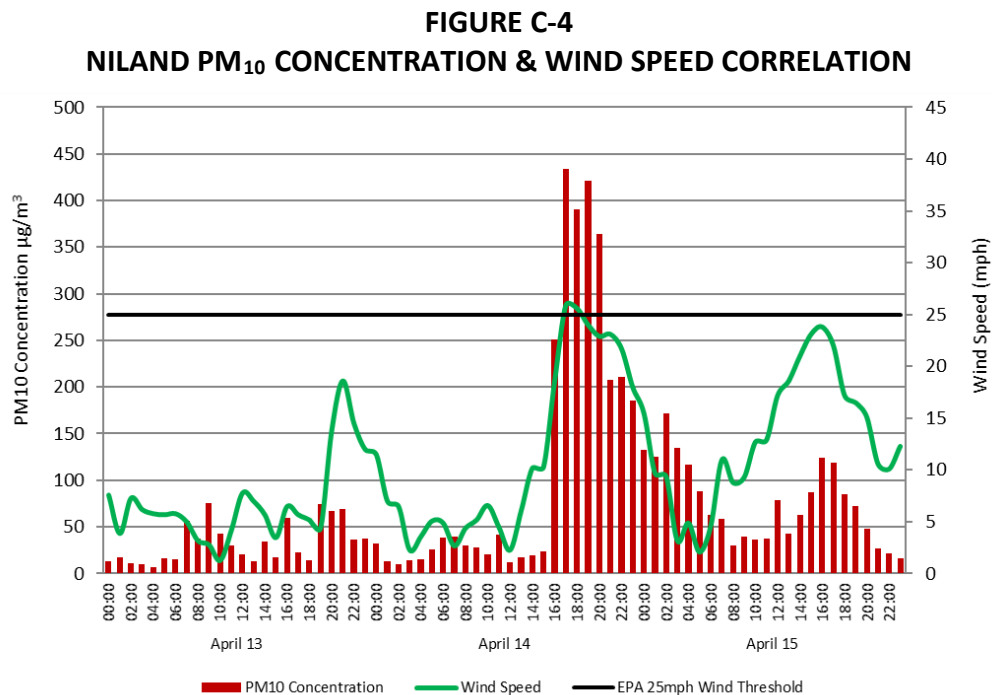
<sup>1</sup> National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall); <https://w1.weather.gov/glossary/index.php?letter=w>



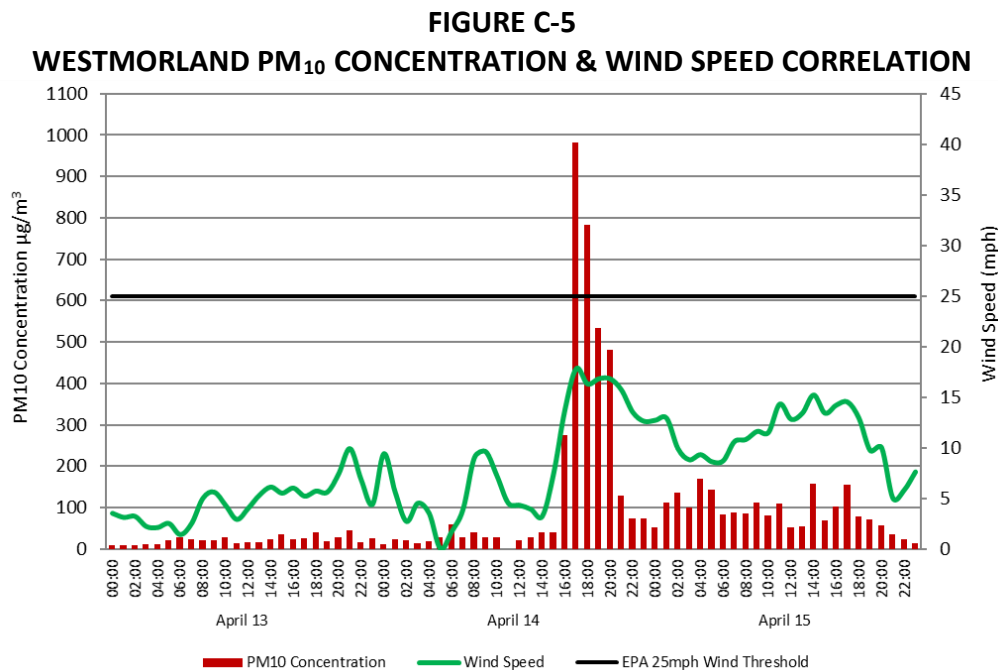
**Fig C-2:** Winds at Calexico station did not reach the 25mph wind threshold. Air quality and wind data from the EPA's AQS data bank



**Fig C-3:** Winds at El Centro station did not reach the 25mph wind threshold. Air quality and wind data from the EPA's AQS data bank



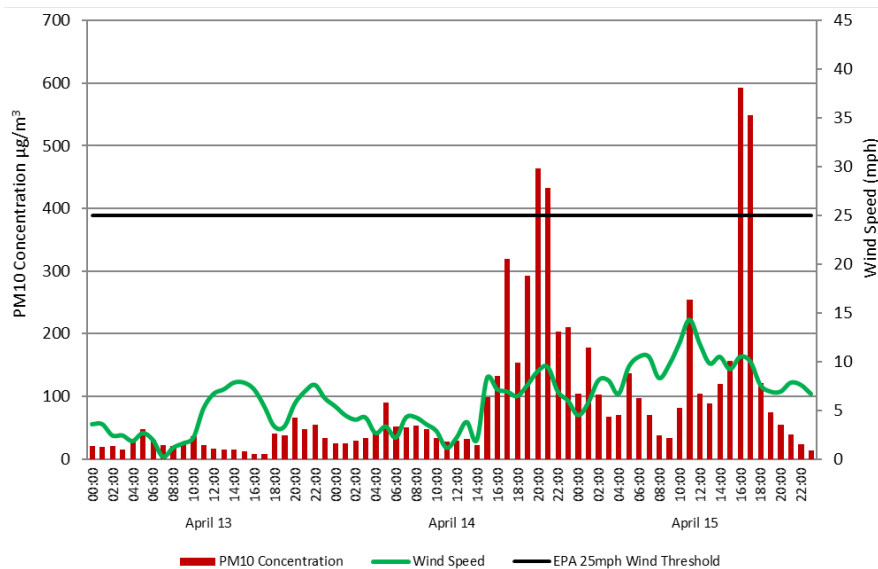
**Fig C-4:** Winds at Niland station exceeded the 25mph wind threshold which caused the monitor to measure elevated concentrations. Air quality and wind data from the EPA's AQS data bank



**Fig C-5:** Winds at Westmorland station did not exceed the 25mph wind threshold. However, dust suspended by higher winds upstream settled out of the air as lower winds passed over the monitor. Air quality and wind data from the EPA's AQS data bank

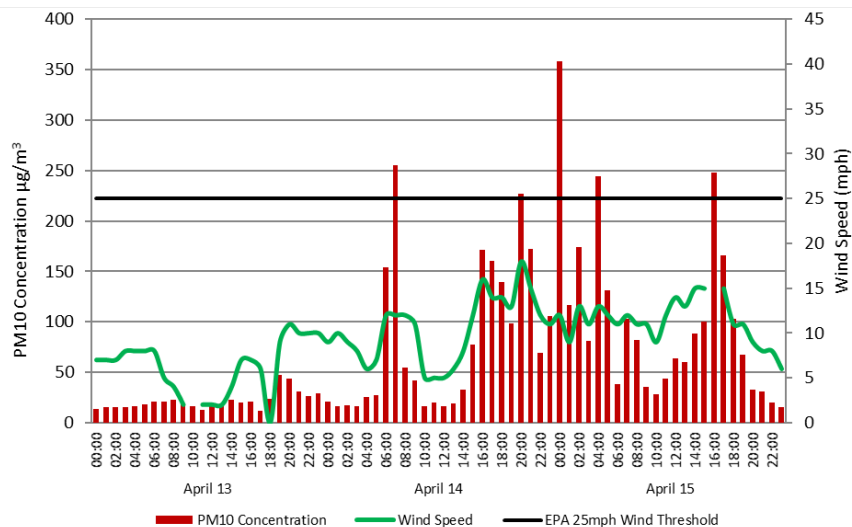
## EASTERN RIVERSIDE COUNTY MONITORING SITES

**FIGURE C-6**  
**TORRES MARTINEZ DESERT CAHUILLA TRIBAL PM<sub>10</sub> CONCENTRATION & WIND SPEED CORRELATION**



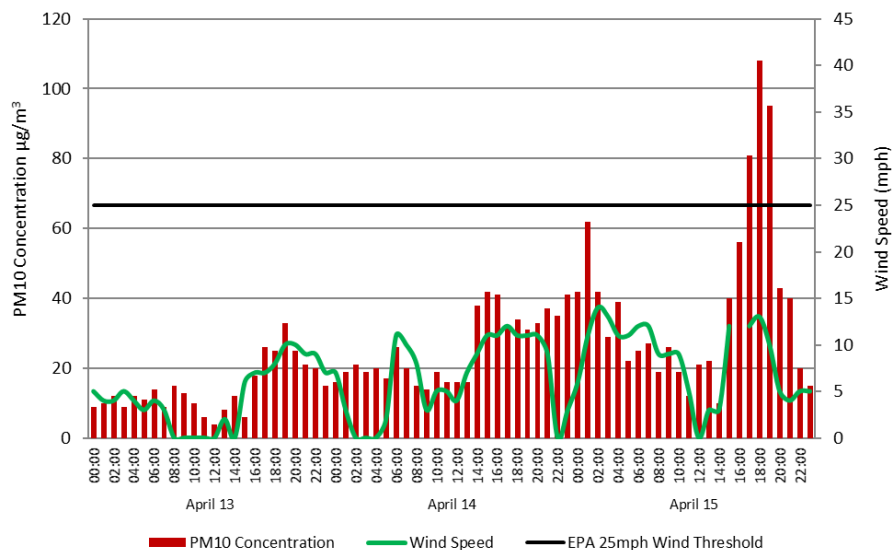
**Fig C-6:** Winds at the Torres Martinez Desert Cahuilla Indians Reservation station did not exceed the 25mph wind threshold. However, the monitor still measured elevated PM<sub>10</sub> levels. Air quality and wind data from the EPA's AQS data bank

**FIGURE C-7**  
**INDIO (JACKSON ST) PM<sub>10</sub> CONCENTRATION & WIND SPEED CORRELATION**



**Fig C-7:** Winds at the Indio (Jackson St) station did not exceed the 25mph wind threshold. However, the monitor still measured elevated PM<sub>10</sub> levels. Air quality and wind data from the EPA's AQS data bank

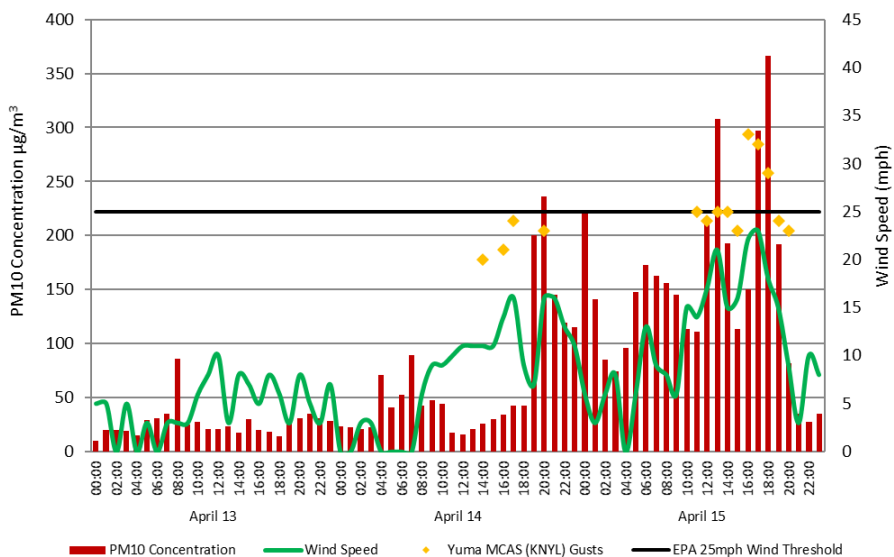
**FIGURE C-8**  
**PALM SPRINGS FIRE STATION PM<sub>10</sub> CONCENTRATION & WIND SPEED CORRELATION**



**Fig C-8:** Winds at the Palm Springs Fire Station did not exceed the 25mph wind threshold. However, the monitor still measured moderately elevated PM<sub>10</sub> levels. Air quality and wind data from the EPA's AQS data bank

### SOUTHWESTERN ARIZONA

**FIGURE C-9**  
**YUMA, ARIZONA SUPERSITE PM<sub>10</sub> CONCENTRATION & WIND SPEED CORRELATION**



**Fig C-9:** Yuma Supersite saw a rise in PM<sub>10</sub> concentrations in response to an increase in winds late in the day. Air quality data from the EPA's AQS data bank. Wind data is from the NCEI's QCLCD system